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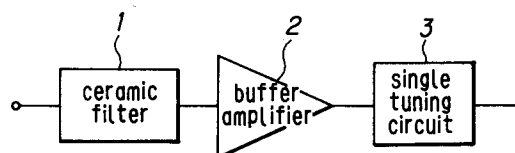
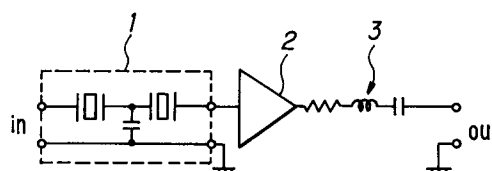
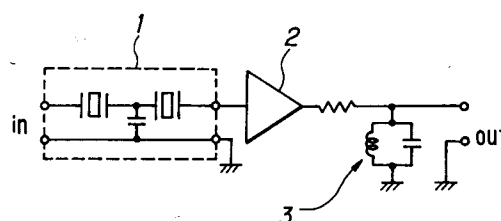
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**04.11.92 Bulletin 92/45**(71) Applicant: **KOKUSAI ELECTRIC CO., LTD.**  
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**WAGNER & GEYER Patentanwälte**  
**Gewürzmühlstrasse 5 Postfach 246**  
**W-8000 München 22(DE)**(54) **Intermediate frequency filter.**

(57) An intermediate frequency filter for an intermediate frequency used in the receiver section of a digital radio communications apparatus is composed of an amplitude-flat ceramic filter incorporating two ceramic resonators, a buffer means and a single tuning circuit having the center frequency thereof within the bandwidth of the amplitude-flat ceramic filter, all being connected in series with each other. The center frequency of the single tuning circuit and Q are adjusted to approximate the amplitude characteristic of the intermediate frequency filter to that of TBT filter ( $0.4 \leq \text{parameter } m \leq 1.0$ ).

**FIG. 1(A)****FIG. 1(B)****FIG. 1(C)**



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## EUROPEAN SEARCH REPORT

Application Number

EP 92 10 6560

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	US-A-4 048 595 (C.R. VALE) 13 September 1977 * the whole document *	1	H03H9/54
A	--- MARCONI INSTRUMENTATION, vol. 15, no. 1, 1975, ST ALBANS GB pages 10 - 14; D.E.O'N, WADDINGTON: 'NARROW BAND CRYSTAL FILTER DESIGN' * the whole document *	1	
A	--- US-A-3 359 512 (S.MALINOWSKI ET AL) 19 December 1967 * the whole document *	1	
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			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H03H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 08 SEPTEMBER 1992	Examiner COPPIETERS C.
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document			